sold by respondent or for any fire warning system containing such heat detectors:

CAUTION: In most residential fires dangerous levels of smoke, heat and carbon monoxide gas will build up before the heat detector alarm goes off.

The above-required language shall be printed in a typeface and color which are clear and conspicuous, and, in multi-page documents, shall appear on the cover or first page. Nothing contrary to, inconsistent with, or in mitigation of the above-required language shall be used in any advertising or promotional materials.

With respect to any film, video tape, or slide promotional material, the above-required language shall be included both orally and visually within the first minute of the presentation, in a manner designed to ensure clarity and prominence.

III.

It is further ordered, That respondent shall, within 180 days after service of this order, send by first-class mail, to each identifiable purchaser of respondent's fire alarm products since January 1, 1979, the disclosure required by Part II. **[71]**

Purchasers shall be deemed identifiable if they can be traced using warranty cards or testimonial letters in respondent's possession and/or using sales records maintained by respondent's dealers.

IV.

It is further ordered, That respondent shall distribute a copy of this order to all of its officers and to all employees, agents or representatives having sales or promotional responsibilities with respect to the subject matter of this order. Respondent shall also distribute a copy of this order to each dealer of its fire alarm products.

V.

It is further ordered, That respondent shall maintain documents as will demonstrate compliance with this order for a period of three years from the date the document is created or used, whichever is later. Such documents shall be made available to the Commission or its staff for inspection and copying upon reasonable request and shall include, but not be limited to, the following:

(a) Copies of each nonidentical form of promotional and training materials disseminated by respondent; [72]

(b) The name and last known address of each dealer of respondent's fire alarm products; and

(c) The name and last known address of each purchaser identified under Part IV of this order.

VI.

It is further ordered, That respondent shall notify the Commission at least thirty (30) days prior to any proposed change in the corporate respondent such as dissolution, assignment or sale resulting in the emergence of a

successor corporation, the creation or dissolution of subsidiaries or any other change in the corporation which may affect compliance obligations arising out of the order.

VII.

It is further ordered, That respondent shall, within 120 days after service upon it of this order, file with the Commission a [73] report, in writing, setting forth in detail the manner and form in which it has complied with this order.

OPINION OF THE COMMISSION

BY AZCUENAGA, *Commissioner:*

I. INTRODUCTION

Figgie International, Inc. ("Figgie") is an Ohio corporation that manufactures and sells a variety of industrial and consumer fire protection, safety and security equipment. Figgie's Interstate Engineering division ("Interstate") markets two different types of "Vanguard" residential fire warning devices: heat detectors[1] (which

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[1] Vanguard heat detectors are fixed-temperature heat detectors. When the fuse in a fixed-temperature heat detector reaches a certain temperature, it melts and the alarm sounds. Vanguard heat detectors are available with 117° or 136° fuses. Rate-of-rise heat detectors activate when the air temperature increases by more than a certain amount in a certain time period (*e.g.*, more than 15° in one minute).

Interstate manufactures) and smoke detectors[2] (which Interstate purchases from other manufacturers). Interstate sells both types of detectors to independent local dealers, whose salesmen make in-home sales presentation to consumers. From January 1, 1981, through May 31, 1983, Figgie's revenues from sales of Vanguard heat detectors totalled $2,354,000; during the same time period, Figgie's revenue from Vanguard smoke detector sales was $620,000. (CX 127)[3] [2]

On May 17, 1983, the Commission issued a complaint alleging that Figgie had violated Section 5 of the Federal Trade Commission Act. The complaint was amended on November 8, 1983. As amended, Paragraph 5 of the complaint alleges that Figgie represented (1) that its Vanguard heat detectors provide the necessary warning to allow safe escape from most residential fires and (2) that fire alarm systems combining Vanguard heat and smoke detectors provide significantly greater fire warning than

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[2] Vanguard smoke detectors include both photoelectric and ionization detectors. Photoelectric detectors activate when smoke obscures a certain amount of the light transmitted by a light source built into the detector. Ionization detectors detect the presence of particulate matter produced by combustion.

[3] The following abbreviations are used in this opinion:
ID – initial decision
IDF – initial decision finding
Tr. – transcript of testimony
CX – complaint counsel's exhibit
CAP – complaint counsel's appeal brief
CAB – complaint counsel's answering brief
RX – respondent's exhibit
RAP – respondent's appeal brief
RAB – respondent's answering brief

smoke detectors alone. Paragraph 6 of the complaint alleges that those representations were unfair and deceptive.

Administrative Law Judge ("ALJ") Montgomery K. Hyun filed his initial decision on October 23, 1984. Judge Hyun found that Figgie's claim that Vanguard heat detectors would provide the necessary warning to allow safe escape from most residential fires was deceptive unless it was accompanied by a disclosure of the fact that dangerous levels of smoke, heat, and carbon monoxide develop before the heat detectors alarm. He also found that any representation that a combination fire alarm system with both heat and smoke detectors provided significantly greater warning than smoke detectors alone was misleading unless it also disclosed that fire protection standards required that a smoke detector be placed outside each sleeping area and on each additional story of the residence. His order prohibits Figgie [3] from making those claims without the specified affirmative disclosures and also forbids misrepresentations of National Fire Protection Association standards, misrepresentations of heat and smoke detector performance characteristics, and unsubstantiated heat and smoke detector performance claims.

Both Figgie and complaint counsel have appealed the ALJ's initial decision to the Commission. Figgie's principal argument on appeal is that the record evidence shows that heat detectors do provide the necessary warning to allow safe escape in most residential fires. Figgie also argues that it was not given adequate notice of matter of fact asserted in the proceeding and that the ALJ's decision is based on theories not alleged in the complaint.

Complaint counsel generally agree with the ALJ's decision, but argue that his order should be modified to close certain "loopholes." Complaint counsel also argue that Figgie's distributors should be required to obtain from each heat detector purchaser a signed form acknowledging that the purchaser has seen the affirmative disclosure required by Part II of the order.

This opinion results from the Commission's independent review of the record in this case, including the transcripts of testimony and oral argument, exhibits, pleadings, briefs, and the ALJ's initial decision. The opinion contains findings of fact and conclusions of law that the Commission believes are supported by the preponderance of the evidence on the record as a whole, as required by law.[4] Where the initial decision is inconsistent [4] with the findings and conclusions contained in this opinion, it is set aside. The order issued against the respondent consists of those provisions deemed necessary to prohibit the respondent from engaging in the misrepresentations identified here and to deter the respondent from similar unfair or deceptive practices in connection with any future sales of heat detectors.

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[4] 5 U.S.C. 556(d) (1983); *Steadman v. SEC*, 450 U.S. 91, 95-102 (1981).

II. DID FIGGIE MAKE THE REPRESENTATIONS ALLEGED IN PARAGRAPH 5 OF THE COMPLAINT?

The Commission will find an act or practice deceptive[5] if three requirements are met. First, there must be a representation, omission, or other practice likely to mislead consumers. Second, the consumers must interpret the message reasonably under the circumstances. Third, the misleading representation, omission, or practice must be material – that is, likely to affect consumer decisions or conduct. Our deception analysis focuses on [5] risk of consumer harm; actual injury to consumers need not be proved.[6]

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[5] Paragraph 6 of the complaint alleges that the representations at issue were unfair as well as deceptive. Since the trial record and the initial decision focus on deception rather than unfairness, this opinion also analyzes the representations in terms of deception. The Commission's deception jurisdiction has been described as a "subset" of our unfairness jurisdiction. *International Harvester Co.*, 104 F.T.C. 949, 1060 (1984); *see also, Southwest Sunsites, Inc.*, Docket No. 9134, slip op. at 103 n. 81 (January 15, 1985) [105 F.T.C. 7], *aff'd*, No. 85-7182 (9th Cir. April 1, 1986). Put another way, unfair practices are not always deceptive but deceptive practices are always unfair.

[6] *International Harvester Co.*, 104 F.T.C. 949, 1056 (1984); *Cliffdale Associates, Inc.*, 103 F.T.C. 110, 164-66 (1984). As Commissioner Bailey noted in her Concurring and Dissenting Statement in *Cliffdale*, she believes that a deceptive act or practice is best analyzed as one that has the tendency or capacity to mislead a substantial number of consumers in a material way. While we have followed the analysis used in *Cliffdale*, we agree that respondent's practices in this case were deceptive under either analysis of a deceptive act or practice.

Before deciding whether Figgie's claims are deceptive, we must first determine whether Figgie's promotional materials make the representations alleged by the complaint.[7]

A. *Figgie's Promotional Materials*

The promotional materials that Figgie supplied its local distributors for use at in-home sales presentations – including a slide show (accompanied by a taped narration), sales brochures and the cardboard demonstration house – make several express representations. [6]

First, the promotional materials point out that anyone could suffer death, injury, or serious property damage from a residential fire. This message was communicated in a particularly dramatic and effective way by the two slide presentations prepared by Figgie.[8]

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[7] When it examines an advertisement to determine whether the ad does or does not make a particular claim, the Commission often distinguishes express and implied representations. Either type of representation may be deceptive. An express claim is one that is communicated in words or images so plain and unambiguous that virtually every reader or viewer of the advertisement will perceive it. An implied claim may arise from a statement that may be reasonably interpreted in several different ways or from an express claim that leads to an additional inference. In some cases, an examination of the advertisement will allow the Commission to conclude that it makes a particular implied claim; in other cases, surveys, copy tests, expert opinion, or other extrinsic evidence that it is reasonable to interpret the ad as making the implied claim will be necessary. *Thompson Medical Co.*, 104 F.T.C. 648, 788-90 (1984).

[8] The original slide show (CX 129-31) was replaced by a newer version (CX 132-33, Tr. 1586-1604) in 1983. (CX 135, Admission No. 59)

Both versions of the slide show depict houses engulfed in smoke and flames. After reciting some sobering statistics concerning deaths, injuries, and property losses resulting from residential fires, the narrator of the newer show states that fire "can happen to you tomorrow." (Tr. 1589) "Fire can occur in your home," the narrator says later. "Don't believe that a household fire is something that happens only to other people." (Tr. 1590) *The Purpose of My Visit*, a brochure shown to consumers during sales presentations, contains a page headlined "Fire Can Happen To You," which states:

> The chances are that the average family will experience one fire every generation serious enough to have the fire department respond. (CX 67D, 80E)

Next, the promotional materials emphasize the importance of early fire detection and warning. As the slide show narrator says, "Authorities say there are two things necessary to save you and your family in case of fire. The first is adequate warning." (Tr. 1589-90) "[T]he real killer is time. If every family were warned of the fire in time, nighttime fire deaths and injuries could be virtually eliminated." (Tr. 1597-98) [7]

> Imagine if an early warning system existed for your car that could warn you minutes before a fatal crash. We would all want one. A system like that of course does not exist. Yet, an early warning system does exist that will warn you minutes before a fatal fire condition exists in your home. (Tr. 1599)

What is that "early warning system"? According to one Figgie brochure, "the only way to provide complete and sure fire-warning protection is by using smoke detectors and heat detectors." (CX 63) According to another,

The Best Way to protect yourself is "The Vanguard Combination System," which incorporates both smoke and heat detectors. (CX 71Z-12) According to a third, *If You're Serious About Fire Protection, Install Vanguard, The Reliable Combined Fire Protection System.* (CX 69A) Together, Vanguard heat and smoke detectors are "the combination needed to give a greater measure of life safety." (CX 69C)

Why are heat detectors as well as smoke detectors necessary? Figgie's promotional materials offer three different answers to that question.

First, many residential fires start in kitchens and other rooms "which occasionally experience conditions which may result in improper operation" of smoke detectors. (CX 70B) For example, "smoke detectors should not be installed near kitchens" because "fairly routine cooking occurrences" will cause them to activate. (CX 69C) Vanguard heat detectors provide "immediate early warning" of fires in these areas. (CX 69C)

Second, heat detectors are more reliable and dependable because they are maintenance-free and mechanically rather than electrically operated. According to another Figgie sales [8] brochure, a 1980 test of 175 Vanguard heat detectors that had been installed in the Disneyland Hotel twenty years earlier proved the "long-term dependability" of these detectors, which "do nor require maintenance." (CX 61C) Unlike smoke detectors, the Vanguard heat detector "does not rely on electricity or batteries and has no electronic parts to fail." (CX 68B) Also, "[s]moke detectors are vulnerable to dust, lint, invisible grease vapors, unseen insects, corrosion, and varying climactic

conditions that can . . . render them ineffective." (CX 68B-C)

Third, "heat detectors are essential . . . to guard against the many types of fires where smoke detectors may be ineffective." (CX 68B) *Safe At Home*, the Vanguard owner's manual and warranty book, explains that "[t]here are two extremes of fire to which household fire warning equipment must respond. One is the rapidly developing, high heat fire. The other is the slow, smoldering fire." (CX 66F) Vanguard heat detectors provide "fast response to hot fires" (CX 71Z-12) that "generate heat but little smoke until it is too late for escape." (CX 68B-C) To demonstrate how quickly Vanguard heat detectors responded to hot fires, Vanguard salesmen used a cardboard demonstration house.[9] First, the salesman put a lighted candle inside the small demonstration "house," which had four walls but no roof. After placing a piece of tissue on top of the house, the salesman held the heat detector just above the tissue [9] "roof." The heat detector usually alarmed before the tissue was even scorched.

Finally, Figgie's promotional materials clearly represent that heat detectors contribute more to residential fire safety than do smoke detectors. While both heat and smoke detectors should be installed, "Heat Detectors Have Probably Saved More Lives And Property Than Any Other Fire Detection Device." (CX 63) One brochure

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[9] Although this demonstration house (CX 81) was designed and first used in sales presentations by a Vanguard distributor in Houston, Figgie then offered all Vanguard distributors the house and a suggested script for salesmen to follow when performing this demonstration. (CX 88)

states that kitchen fires account for 65% of household fires. (CX 69C) Another contains a graph showing that 569 of 992 (57.2%) fires of known origin that resulted in Vanguard fire alarm activations started in kitchens and other areas where installation of smoke detectors is not recommended (CX 70B, E) It also states that 734 of 1107 (66.2%) reported activations were the types of fires that "might be responded to best by heat detectors." (CX 70B) The original slide show presentation portrayed a demonstration fire in which three heat detectors gave quicker warning than a smoke detector. (CX 130M) Illustrations showing where Vanguard detectors should be installed always indicate more recommended locations for heat detectors than smoke detectors. (CX 66O, 67Q) Figgie's sales brochures usually depict a combination system consisting of five heat detectors and one smoke detector. (CX 61H, 67P, 69A, 70G, 71Z-13, and 80Q).

B. *Did Figgie Claim That Vanguard Heat Detectors Provide The Necessary Warning To Allow Safe Escape From Most Residential Fires?*

The ALJ concluded that Figgie did represent, as alleged in Paragraph 5(1) of the complaint, that "[i]n the event of most fires, [10] respondent's heat detectors provide the necessary warning to occupants to allow them to escape safely." We agree that consumers reasonably would have interpreted Figgie's promotional materials as making that claim.[10]

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[10] Our conclusion is based on our own examination of Figgie's promotional materials. We note, however, that our

That alleged representation can be thought of as two separate but closely related representations. The first is that Vanguard heat detectors provide enough advance warning for safe escape from at least some fires; in other words, that Vanguard heat detectors are effective residential fire warning devices. The second is that Vanguard heat detectors are effective fire warning devices in most residential fires, not just in rare or unusual situations.

The first claim is implied by the mere offering for sale of Vanguard heat detectors as residential fire warning devices. It is made expressly in statements that "thousands of lives [have been] saved" (CX 71Z-12) by Vanguard heat detectors, which provide "fast response to hot fires" (CX 71Z-12), "immediate early warning" and "reliabe, service-free, long-lasting protection." (CX 69C) It is also expressly present in the statement that the Vanguard combination fire protection system, which incorporates both heat and smoke detectors, is an "early warning system . . . that will warn you [**11**] minutes before a fatal fire condition exists" (Tr. 1599) and by the numerous other representations of the virtues of the combination system discussed above.[11]

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conclusion is corroborated by complaint counsel's expert witness, Dr. Cohen, whose testimony is the only extrinsic evidence on the record of how consumers would interpret Figgie's promotional materials. (Tr. 303)

[11] The Vanguard combination system comprises two different subsystems: one designed to detect abnormally high heat, the other designed to detect smoke. Neither subsystem's operation is dependent upon the other. Therefore, a claim for the combination system generally is really a claim for each subsystem.

The second part of the representation alleged by Paragraph 5(1) – that Vanguard heat detectors provide the necessary warning in most fires – is explicit or implicit in several claims quoted above. For example, one Figgie brochure states that 734 of 1107 (66.2%) reported fires that resulted in activation of a Vanguard fire warning device were of the type that "might be responded to best by heat detectors." It also states that over 57% of those reported fires that were of known origin started in kitchens and other areas where smoke detectors should not be installed. (CX 70B) The implication of the second statement is that heat detectors provided the necessary warning for safe escape in at least 57% of those fires.

Figgie argues correctly that its promotional materials do not represent that Vanguard heat detectors will provide the necessary warning to all occupants of a residence "no matter . . . what type of fire occurs" or "under all circumstances." (RAB 19) But the complaint contains no allegation of such a representation. It alleges only that Figgie represents that its heat detectors are effective "in the event of *most* fires" (emphasis added). **[12]**

C. *Did Figgie Claim That Its Combined System of Heat Detectors and Smoke Detectors Provides Significantly Greater Fire Warning Protection Than Smoke Detectors Alone?*

The ALJ also found that Figgie did represent, as alleged in Paragraph 5(2) of the complaint, that its "fire alarm systems combining heat detectors and smoke

detectors provide significantly greater fire warning protection for occupants than smoke detectors alone." Again, we agree.[12]

This representation is made expressly in a number of Figgie's promotional materials. For example, the owner's manual and warranty book states:

The "Vanguard Thermosonic" Heat Detector is designed to detect abnormally high temperatures. The "Vanguard Smokesonic" Smoke Detector is designed to detect abnormal quantities of smoke. Every fire warning system for homes should include both heat detectors and smoke detectors, properly applied, and located in accordance with their best usage. (CX 66F)

The original version of the slide show presentation tells the story of one fire victim who learned too late that "to have adequate protection the home must have heat detectors as well as smoke detectors." (CX 130C) A Figgie sales brochure claims that a "systematic combination" of heat and smoke detectors is needed "to maximize chances for fire survival," and that "people who have depended only on smoke detectors . . . have been injured and died as a result of fire." (CX 68B, C) [13]

As described in Section II.A. above, Figgie's promotional materials offer three reasons why heat detectors are needed in addition to smoke detectors. First, heat detectors provide "immediate early warning" of fires that start in kitchens and other areas where the installation of

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[12] Complaint counsel's expert, Dr. Cohen, came to the same conclusion. (Tr. 303) Figgie does not contest that it made this representation. (RAP A-8, No. 79)

smoke detectors is not recommended. (CX 69C, 70B) Second, heat detectors are more reliable because they "do not require maintenance" (CX 61C) and "[do] not rely on electricity or batteries." (CX 68B) Third, heat detectors provide "fast response to hot fires" (CX 71Z-12) that "generate heat but little smoke." (CX 68B-C)

III. WERE FIGGIE'S CLAIMS MATERIAL?

Having concluded that Figgie made the representations alleged in the complaint, we must next decide whether those representations were material. A material representation is one that is likely to affect a consumer's choice of, or conduct regarding, a product or service because it involves some characteristic of that product or service that is important to consumers.[13]

The two representations that are alleged in the complaint here are presumed material for two reasons. First, express claims are presumed material.[14] Second, claims that concern the central characteristics of the product or service are presumed [**14**] material.[15] Both of these representations concern the single most important characteristic of the Vanguard heat detector: its effectiveness as a fire warning device. The first representation is that Vanguard heat detectors give enough warning of most fires to allow safe escape. The second representation is that a fire warning system incorporating Vanguard heat detectors provides significantly more protection than one that

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[13] *Cliffdale Associates, Inc.*, 103 F.T.C. 110, 165 (1984).

[14] *International Harvester Co.*, 104 F.T.C. 949, 1057 (1984).

[15] *Id.*

does not. It is hard to imagine that any consumer who was considering the purchase of a fire warning device would not find those two performance claims – one absolute, the other relative – extremely material.[16] The Commission will always consider relevant evidence offered to rebut such presumptions of materiality, but Figgie has offered no such evidence here. We conclude that the representations at issue are material.

IV. WERE FIGGIE'S CLAIMS LIKELY TO MISLEAD CONSUMERS?

Having concluded that the representations made by Figgie were material, we must next determine whether those claims were likely to mislead consumers. Some representations are deceptive because they are false. Other representations are deceptive because qualifying information needed to correct misimpressions created by the representations is omitted. Even silence can be [**15**] deceptive if the circumstances are such that an implied but false representation is communicated.[17]

The ALJ found that both the representations at issue here were deceptive because Figgie failed to disclose

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[16] Figgie sells four to five times as many heat detectors as smoke detectors (CX 125, 127A), which indicates that those claims are persuasive.

[17] For example, the very act of offering goods for sale creates an implied representation that the goods are reasonably fit for their intended uses and free of gross safety hazards. Silence in circumstances that create no implied representations – often termed a "pure omission" – is not deceptive although it may be unfair. *International Harvester Co.*, 104 F.T.C. 949, 1057-60 (1984).

certain qualifying information. We agree with some of his findings, but disagree with others.

A. *The Evidence Presented By Complaint Counsel*

Complaint counsel base their allegations that heat detectors neither provide the necessary warning to allow escape from most fires nor provide significantly greater protection when used in combination with smoke detectors on the results of several fire detection device test programs and on the testimony of three experts on fire science and fire detection devices.

1. The California Fire Chiefs' Tests

The 1978 California Fire Chiefs' Association Residential Fire Detector Test Program is the most relevant of those fire detection device tests because it tested the performance of Vanguard heat detectors directly. The objective of the "Cal Chiefs' Tests," which were jointly sponsored by the California Fire Chiefs' Association and the Los Angeles City Fire [**16**] Department, was "to investigate and report on residential fire detector response, reliability, and life safety potentials under realistic conditions (*i.e.*, uncontrolled fire development in actual dwellings)." (CX 10) The tests were funded by contributions from the International Association of Fire Chiefs, local and state government agencies, and a number of fire detection device manufacturers, including Figgie's Interstate Engineering division. Interstate's chief engineer, Mr. Gallagher, was a consultant to the test program's planning committee. (CX 1L)

One of the houses used in this series of tests was a one-story, three-bedroom dwelling with a typical central hall floor plan. The other test house was a two-story dwelling with basement. The houses were completely furnished with furniture, carpets, drapes, curtains, books, and bedcovers during the tests. After each test fire, the structure was restored to its original condition and refurnished before the next test fire was set. (CX 1Q-R)

Fifty-six fire detectors were installed in the one-story test house and 64 in the two-story house. The detectors were arranged in eight-detector panels. Each panel consisted of three ionization smoke detectors, three photoelectric smoke detectors, and two fixed-temperature heat detectors, one of which was always a Vanguard 136° heat detector. Locations of the detector panels in the one-story test house included the living room, two bedrooms, hall, kitchen, attic and furnace room. In the two-story test house, panels were placed in those seven locations and [17] also in the dining room. At each test site, an adjacent house was used as a "command center." Each detector was wired to a clock in the command center. The clock stopped when the detector first alarmed. An oscillograph recorded the complete operational cycle of each detector. (CX 1V-W)

Temperature-measurement devices known as thermocouples were installed at five different heights in each room where detectors were placed. Environmental gas sampling equipment was used to measure levels of oxygen, carbon monoxide, and carbon dioxide at five locations: two bedrooms, the hall (or the upstairs landing in the two-story house), kitchen, and living room. Smoke obscuration – that is, the reduction in light transmission

caused by the presence of smoke – was measured by a light beam aimed at a photoelectric cell. Four such beams were used: one in each of two bedrooms, the entry way and the hall (or the upstairs landing in the two-story house). In addition, videotape recorders with time and date generators were used to film each test. Sound level measurements were also taken to determine the loudness of the alarm sounded by each detector throughout the house. (CX 1V-Z4)

Eleven test fire scenarios were developed based upon the California State Fire Marshall's "California Fire Incident and Reporting System" statistics on fatal fires.[18] "Flaming" fire scenarios included cotton fabric placed against a wall heater, a [18] lighted candle placed under clothing in a closet (to stimulate a child playing with matches in a closet), an overheated coffeemaker under kitchen cabinets and gasoline in a garage ignited by a water heater. "Smoldering" fire starts were represented by a lighted cigarette on a living room couch, a cigarette on a bed, cooking oils on a kitchen stove, overheated electrical wire under carpeting, an overheated motor in a forced air unit and overheating in a gas-fired wall furnace. Each scenario was repeated a number of times in each test house under varying conditions. For example, one test of each scenario was conducted with bedroom doors and windows open and the heater off. (CX 1R-U) Each test fire was allowed to develop at its own rate. Data was collected until the fire self-extinguished, all the

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[18] At the request of Interstate's chief engineer, a relatively large number of kitchen fires were also included although kitchen fires rarely result in fatalities. (Tr. 762)

detectors activated or certain extreme temperatures or atmospheric conditions were reached.[19] (CX 125) A total of 71 test fires were set, and over two million pieces of data were recorded. (CX 128)

Evaluation of detector performance was based on the amount of "excape time" each detector provided – in other words, how long before certain hazardous conditions developed did the detector activate? Smoke detectors usually provided two to six minutes escape time before any of the hazardous conditions, or [**19**] "tenability limits," developed.[20] Heat detectors never gave more than 1.3 minutes escape time; in 92% of the test fires, the earliest-sounding heat detector alarmed after one or more tenability limit was exceeded. (Tr. 815-16) In one test fire, the earliest-sounding heat detector and earliest-sounding smoke detector activated at the same time. But in every other test fire, the first detector to sound a warning was a smoke detector. (Tr. 879)

2. The Indiana Dunes Tests

The Indiana Dunes Tests, designed and administered by the National Bureau of Standards and Underwriters'

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[19] For example, the test was terminated if the air temperature in the room where the fire started reached 500° or the carbon monoxide level reached one percent.

[20] As defined for the tests, tenability limits were a temperature of 150° F., 1000 parts per million (ppm) carbon monoxide or smoke obscuration of 11% per foot (*i.e.*, smoke that is dense enough that 11% of the amount of light coming from a source such as a lamp or a window is obscured one foot away from that source). (Tr. 817)

Laboratories in 1974-76, were also conducted in actual homes under conditions that closely simulated those that would exist in typical residential fires. (Tr. 967-70) The testing methodology was generally similar to that used in the Cal Chiefs' Tests. (Tr. 971-72) Tenability limits were set at 150°, 400 ppm carbon monoxide and smoke obscuration of 15% per foot. (Tr. 985) **[20]**

In the first series of tests ("Dunes I"), smoke detectors and rate-of-rise heat detectors were tested. Thermocouples were used as surrogates for fixed-temperature heat detectors.[21] (Tr. 980) In each of the 37 Dunes I test fires, the first detector to sound an alarm was a smoke detector. The earliest-sounding smoke detectors provided an average escape time of 18.6 minutes, but the earliest-sounding thermocouples provided an average escape time of negative 2.2 minutes. In other words, the first thermocouples to alarm in the 37 test fires sounded an

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[21] Thermocouples measure temperature and transmit temperature readings continuously. When the Dunes I data was analyzed, it was assumed that a Vanguard 136° heat detector would have activated at the same time that the thermocouple reading reached 136°. In fact, the Vanguard heat detector would probably have alarmed some time after the thermocouple indicated 136° because, unlike the thermocouple, the Vanguard heat detector would have been affected by "thermal lag." When a frozen dinner is taken from the refrigerator and placed in a preheated oven, quite a bit of time will pass before the dinner absorbs enough heat to reach the same temperature as the air in the oven. Similarly, in the event of fire, a 136° heat detector does not alarm as soon as the air temperature reaches 136°. By the time the heat detector fuse absorbs enough heat to reach 136°, the ambient temperature will have risen considerably above that temperature. (Tr. 977-79)

average of 2.2 minutes after one of the tenability limits was exceeded. (Tr. 986-88)

In response to criticism of "Dunes I" from Interstate's chief engineer, Vanguard heat detectors were tested directly in a second series of tests ("Dunes II"). The Vanguard heat detectors used in Dunes II, however, performed "considerably poorer" than the thermocouples used in Dunes I. (Tr. 990) For example, the thermocouples gave three minutes or more escape time in five of [21] 37 Dunes I test fires, but Vanguard heat detectors never provided as much as three minutes escape time in 22 Dune II test fires. (Tr. 991-92)

3. Expert Testimony

Based on the results of the Cal Chiefs' Tests, the Indiana Dunes Tests and other tests of fire detection devices, complaint counsel's three experts on fire science and fire detection devices agreed that heat detectors sounded after the development of hazardous conditions in most residential fires.

According to Mr. Clark, a member of the staff of the National Fire Academy of the Federal Emergency Management Agency, the consensus among fire service professionals is that "[h]eat detectors do not supply early warning to fires." (Tr. 699) He testified that "[t]he literature indicates that in terms of heat detectors, the occupants would not have enough time to evacuate their home because their exit paths would become untenable either due to smoke, carbon monoxide, or even the heat levels." (Tr. 699) He also testified that "in terms of life

safety . . . it doesn't make any difference if you have . . . heat detectors" in addition to smoke detectors; "in terms of property protection," he added, "it may make a difference to have those additional heat detectors." (Tr. 712)

Mr. Martin, a Los Angeles Fire Department fire protection engineer who was the assistant site director for the Cal Chiefs' Tests, said that "Vanguard heat detectors do not give sufficient warning . . . to the occupants of a house to escape during a [22] fire." (Tr. 880) He also testified that "a combination of the heat detectors and smoke detectors do not give you significant additional alarm over smoke detectors alone." (Tr. 880)

Mr. Bukowski, a National Bureau of Standards research engineer who helped design and administer the Indiana Dunes Tests, concluded that heat detectors "just don't appear to be effective." (Tr. 1005) According to him, the fire detector test results indicate that "smoke detectors provide adequate escape time in many, many more of the cases and in fact that the heat detectors provided very little in the way of escape time and warning." (Tr. 1009) In other words, "in most fires life-endangering conditions typically occur prior to the activation of heat detectors and activation of smoke detectors generally occur prior to the occurrence of life-endangering conditions." (Tr. 1013-14) He testified that it was generally not necessary to supplement smoke detectors with heat detectors, and that installing heat detectors in attics, garages, and other areas where smoke detectors could not be installed gave a "marginal at best" increase in protection. (Tr. 1058)

B. *The Evidence Presented By Figgie*

Figgie's defense to complaint counsel's allegations is based on the Underwriters' Laboratories listing of Vanguard heat detectors, the National Fire Protection Association's Standard 74, Vanguard purchaser testimonials and the testimony of two experts on fire detection devices. [23]

1. The Underwriters' Laboratories Listing of Vanguard Heat Detectors

Underwriters' Laboratories ("UL") is a well-known organization that establishes product standards, tests various products and gives a UL listing to those products that meet its standards. Vanguard heat detectors have been tested by UL and listed as meeting UL's standard for heat detectors, UL-539. (Tr. 1285-87) Figgie argues that the UL listing demonstrates the effectiveness of Vanguard heat detectors. (RAP 9)

2. The National Fire Protection Association's Standard 74

The National Fire Protection Association ("NFPA") is an independent standard-setting organization that establishes model fire protection codes. Many state and local government regulations incorporate NFPA's code provisions. NFPA Standard 74, which sets standards for household fire warning equipment, discusses the proper installation, maintenance and use of both smoke and heat detectors. Appendix B to the 1980 edition of Standard 74 states that "areas lending themselves to protection with

heat detectors are: kitchen, dining room, attic (finished or unfinished), furnace room, utility room, basement, and integral or attached garage." (CX 23N-O) Figgie argues that the discussion of heat detectors in this standard implies that NFPA recognizes heat detectors as effective residential fire warning devices. (RAP 9-10) **[24]**

3. Consumer Testimonials

Five Vanguard heat detector purchasers testified that those heat detectors supplied them with the warning necessary to prevent or escape safely from fires in their residences. The record also includes dozens of letters from Vanguard heat detector purchasers attesting to the effectiveness of those heat detectors as fire warning devices and a description of 1107 Vanguard heat detector activations between 1959 and 1980 that is based on purchaser testimonial letters. (CX 72, 70)

Figgie argues that "[t]he record contains no evidence of a single instance in which a Vanguard heat detector failed to provide the necessary warning to allow a safe escape" from a residential fire. (RAB 4) Both Figgie's and complaint counsel's experts testified that they were unaware of any such incident. (Tr. 722, 900, 1536-37, 1702)

4. Expert Testimony

Figgie's experts on fire detection devices testified that heat detectors are effective fire warning devices and that a combination fire warning system incorporating heat and smoke detectors offers more protection than smoke detectors alone.

Mr. Ward, the Springfield, Illinois, Commissioner of Public Health and Safety, disagreed with complaint counsel's expert testimony that heat detectors do not provide the necessary warning in most residential fires (Tr. 1715-16) and that the combination of heat and smoke detectors to not provide [25] significantly greater warning than smoke detectors alone (Tr. 1717). He testified that heat detectors are "extremely reliable" devices that "can and do provide the necessary warning" (Tr. 1702) and that "the combination of smoke and heat [detectors] serves probably the best interests of protecting those who are residents in structures for normal habitation." (Tr. 1703)

Mr. Lee, the retired Chief of the Charlotte, North Carolina, Fire Department, testified that a combination of heat and smoke detectors has two advantages over smoke detectors alone. First, heat detectors function better in "the kitchen, garage, a utility room, a furnace room, or in areas where the temperature gets extremely high or low." Second, "there is a reliability factor due to the mechanical makeup of a heat detector that provides a backup . . . in the event of the failure of a smoke detector through a power failure or battery failure or what have you." (Tr. 1525)

C. *An Evaluation Of the Record Evidence*

1. Does The Evidence Demonstrate That Vanguard Heat Detectors Provide The Necessary Warning to Allow Safe Escape From Most Residential Fires?

After a careful review of the evidence introduced by both parties, we conclude that the most probative

evidence on the issue of whether heat detectors provide the necessary warning to allow safe escape in most residential fires is found in the [26] results of the Cal Chiefs' and Indiana Dunes tests (and the expert testimony concerning those results).

Both sets of tests were designed and administered by expert professionals working on behalf of respected fire protection organizations, private testing laboratories and government agencies. The test fire scenarios closely resembled actual residential fire situations. Elaborate scientific instrumentation was used to collect millions of individual data concerning the environmental conditions produced by the test fires and the performance of the fire detection devices being tested. The data were carefully analyzed, and detailed reports describing those analyses were published. These reports are considered reliable authority by residential fire protection experts and have resulted in numerous revisions to state and local regulations setting minimum standards for residential fire detection devices. (Tr. 701-02)

As discussed above, the Cal Chiefs' and Indiana Dunes tests show that smoke detectors provide significantly earlier earning of potentially dangerous conditions resulting from a residential fire than do heat detectors. More importantly, heat detectors often provide no advance warning at all. In the Cal Chiefs' Test, for example, the earliest-sounding heat detector alarmed after a tenability limit was exceeded in 92% of the test fires. We agree with the expert witnesses who concluded that these tests demonstrate that heat detectors do not provide the

necessary warning to allow safe escape in most residential fires.[22] (Tr. 699, 880, 1013-14) Figgie's experts disagreed with that [27] conclusion, but we give their opinions little weight because we do not believe that their opinions were adequately supported.[23]

Figgie offers several criticisms of the methodology used in those testing programs. First, Figgie points out that these tests involved fires in unoccupied houses and argues that the conclusions drawn from such tests are necessarily based on unrealistic assumptions about what would have happened if people had actually been present during those fires. While the Cal Chiefs' and Indiana Dunes test fire scenarios were carefully designed to resemble actual residential fire circumstances as closely as possible, it is true that the fire experts who analyzed the data from those tests had to make assumptions about the effects on humans of certain levels of smoke, heat, carbon monoxide and other environmental conditions. Since no responsible researcher would expose human subjects to the dangers of fire for the purposes of an experiment, any residential fire test must be based on such assumptions. The real issue, therefore, is whether the particular tenability limits chosen by the Cal Chiefs' and Indiana Dunes researchers are reasonable indicators

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[22] The Vanguard heat detectors that were tested were equipped with 136° fuses. Recently, Interstate began to offer 117° heat detectors for sale. It is reasonable to assume that the 117° heat detectors provide earlier warning than 136° heat detectors, but analysis of the Indiana Dunes Tests data indicates that the improvement in performance from the substitution of 117° fuses would likely be marginal at best. (Tr. 1040)

[23] *See Thompson Medical Co.*, 104 F.T.C. 648, 790 n. 11 (1984).

of conditions that could result in serious injury or death. [28]

Figgie argues that the tenability limits used to evaluate heat and smoke detector performance were too conservative. According to Figgie, the test methodology assumed "that people in their own homes will remain still and die in a fire rather than attempt escape through a temperature of 150° Fahrenheit . . . or . . . through smoke in which visibility is obscured beyond ten feet." (RAP 13)

It is true that limited exposure to 11% or 15% smoke obscuration or 150° heat does not necessarily cause death or serious injury. The record, however, contains evidence that such conditions can seriously impede escape. For example, one expert testified that smoke has physiological and psychological effects that make a successful escape less likely. Smoke irritates the eyes, nose and throat, and makes breathing difficult. Smoke also obscures vision, causes disorientation and induces panic. (Tr. 679-80) One study of the effects of smoke obscuration found that blindfolded subjects walked through a smokeless corridor faster than non-blindfolded people walked through the same corridor after a 15% smoke obscuration level had been created. (Tr. 1000-02) And while humans may be able to tolerate a constant 150° temperature under carefully controlled conditions, fire temperatures can increase rapidly once 150° is reached. According to one expert, a residential fire burning at 150° could be 700° (or even hotter) only ten seconds later. (Tr. 931) While some people might escape if given warning after smoke [29] or temperature levels exceeded these tenability limits, it is reasonable to assume that many others would suffer death or serious injury.

Figgie also argues that the evidence it introduced concerning the performance of Vanguard heat detectors in actual residential fires deserves more weight than evidence of performance in test fires. The Cal Chiefs' and Indiana Dunes tests indicate that heat detectors provide the necessary warning in very few fires. While the limited anecdotal evidence from Vanguard purchasers introduced by Figgie may prove that Vanguard heat detectors have sounded warnings early enough to allow escape from some residential fires, it says nothing about whether Vanguard heat detectors provide the necessary warning in most fires. We conclude that the reports of successful heat detector performance introduced by Figgie, which may be representative only of relatively unusual situations, do not deserve as much weight as the Cal Chiefs' and Indiana Dunes findings. [30]

Neither the Underwriters' Laboratories listing of Vanguard heat detectors nor the mention of heat detectors in National Fire Protection Association Standard 74 prove that Vanguard heat detectors provide the necessary warning in most fires. As a former UL testing engineer testified, UL tests "are not intended to demonstrate the performance of any kind of detection device under real fire conditions." (Tr. 1029) In the UL "water bath test," a heat detector is immersed in water. The temperature of that water is increased one degree per minute until the heat detector's alarm sounds. This test determines whether the fuse of a heat detector melts at or near its stated temperature but says nothing about whether that heat detector gives the necessary warning in most residential fires, because, among other things, it avoids the problem of thermal lag.

The UL "oven test" demonstrates that heat detectors are subject to thermal lag. In that test, a heat detector is placed in a circulating air oven. The temperature of the air in the oven is then raised from 80° to 240° at a rate of 40° per minute. In one series of oven tests, Vanguard heat detectors with 136° fuses did not activate until the oven temperature reached 185° to 200° – or well over a minute after the oven temperature reached 136°. (Tr. 1025) Since actual residential [31] fire temperatures can rise much more rapidly than 40° per minute, the temperature at which the detector would alarm in a real fire could be hundreds of degrees higher.[24]

In the UL "fire test," two nine-square-foot pans of alcohol are ignited and the response time of the heat detector is noted. The temperature in the test room at the time the heat detector's alarm sounds is not recorded, but it can be assumed from the amount of thermal energy generated by such a fire that the temperature would be extremely high. The fact that a heat detector alarms when subjected to such extreme conditions does not necessarily indicate that it will provide enough warning for safe escape from most residential fires.

NFPA Standard 74 sets standards for the installation, maintenance and use of residential fire warning equipment. Both heat detectors and smoke detectors are discussed in Standard 74, but only smoke detectors are required under this standard. Section 2-1.1.1 states that

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[24] One expert witness told of one test fire in which the temperature reached 1000° before a heat detector located in the room where the fire was set alarmed. (Tr. 696-97)

"[s]moke detectors shall be installed outside of each separate sleeping area . . . and on each additional story of the family living unit." (CX 23F) A footnote to that section recommends that residents "consider the use of additional smoke or heat detectors for increased protection for those areas separated by a door from the areas protected by the required smoke detectors." (*Id.*) And Appendix A to the standard says that "this standard utilizes smoke [32] detectors as the primary life protection equipment" because "detectable quantities of smoke precede detectable levels of heat in nearly all" residential fires. (CX 23K) The mere mention of heat detectors in NFPA Standard 74 does not prove that heat detectors provide the necessary warning for safe escape in most residential fires.

The preponderance of the evidence on the record demonstrates that Vanguard heat detectors do not provide the necessary warning to allow safe escape from most residential fires. Therefore, we conclude that Figgie's representations that Vanguard heat detectors did provide such warning are deceptive.

2. Does The Evidence Demonstrate That A Fire Alarm System Combining Heat and Smoke Detectors Provides Significantly Greater Fire Warning Protection Than Smoke Detectors Alone?

As discussed in Section II.A. above, Figgie claimed that a combination fire alarm system combining heat and smoke detectors provides significantly greater fire warning protection than smoke detectors alone for three reasons. First, according to Figgie, heat detectors will

provide early warning of the many residential fires that start in kitchens and other rooms where the installation of smoke detectors is not recommended. Second, heat detectors are more reliable than smoke detectors because they are maintenance-free devices that do not operate on electricity or batteries. Third, heat detectors respond more quickly to hot, flaming fires. [33]

The ALJ considered these three distinct claims, each of which is made expressly in Figgie's promotional materials, as one general claim of superiority and concluded that a combined system "can provide increased protection." (IDF 186) We believe it is preferable to evaluate each claim individually.

a. *Heat Detectors May Provide Additional Protection That Some Consumers Would Consider Significant In Areas Where Smoke Detectors Should Not Be Installed*

Certain areas in the house are not suitable locations for smoke detectors. Cooking smoke, automobile exhaust and other atmospheric contaminants or extremely high or low temperatures can cause false alarms in such areas. (Tr. 1525) As NFPA Standard 74 says, "[t]he installation of smoke detectors in kitchens, attics (finished or unfinished), or in garages is not normally recommended as these locations occasionally experience conditions which may result in improper operation." (CX 23N)

Two experts, however, testified that relatively few fatal fires originate in those areas. (Tr. 763, 1059) For example, only about 0.6% of the deaths and 2.2% of the injuries caused by fires in 1981 resulted from residential

garage fires. (CX 28K) Also, smoke detectors located in other parts of a house might give earlier warning of a fire that starts in a kitchen, attic, or garage than a heat detector in the kitchen, attic or garage itself. (Tr. 696-97, 724, 1059) Therefore, it is reasonable to [**34**] assume that the installation of heat detectors in those areas where smoke detectors are not recommended will provide additional protection from death or serious injury in only a relatively small number of residential fires. As one expert testified, the additional protection provided by such heat detectors is "marginal at best." (Tr. 1058)

That is not to say, however, that a slightly better level of fire protection is not significant. As used in the complaint, "significant" simply means "important" or "meaningful." Whether a slightly better level of protection is significant may depend on the seriousness of the harm that could result if the protective device failed to operate. Even a very small amount of additional protection from death or serious injury caused by fire would no doubt be considered significant by some consumers. The record in this case contains no testimony or survey evidence on how much additional protection from fire-related death, injury or property loss would be considered significant by consumers. Complaint counsel have failed to prove that the additional protection is not significant.

The statement concurring in part and dissenting in part states that the expert testimony and test data introduced at trial establish that heat detectors in kitchens, garages, and attics provide "virtually no" additional protection because smoke detectors "almost always" alarm earlier than heat detectors "regardless of their respective locations." First, the partial dissent cites the results of the

1969 Bloomington, Minnesota, fire tests. In one of those test fires, a kitchen fire caused [35] the smoke detector in the adjacent hallway to alarm before the heat detector in the kitchen itself. It would be unwise to draw any conclusions from the results of this single test fire. The fact that a smoke detector located in an adjacent hallway only a few feet from the fire's starting point alarmed earlier provides little, if any, evidence that a smoke detector in any other part of the house would also have alarmed earlier. Second, the partial dissent states that the results of the Cal Chiefs' and Indiana Dunes fire tests "confirm" that smoke detectors outperform heat detectors "regardless of location." Those tests, however, compared the performance of heat detectors and smoke detectors located in the same room. There is considerable evidence in the record that smoke detectors alarm more quickly than heat detectors when both are located in the same room. Since it is not practical, however, to put smoke detectors in kitchens and garages, tests of comparative heat and smoke detector performance in the same room provide little or no meaningful evidence on this issue. Finally, the partial dissent notes the testimony of two fire science experts who concluded that the additional protection provided by the combined system was "marginal" (Tr. 1058) or "slightly better" (Tr. 711). As discussed above, it is not clear that a "marginal" or "slightly better" level of protection would not be considered significant by some consumers. These experts did not say that the additional protection provided by heat detectors would be considered insignificant by consumers, and they would not have been qualified to do so. [36]

Therefore, representations that heat detectors provide significant additional protection when installed in areas where smoke detectors would not function properly are not necessarily deceptive. Such claims, however, must be substantiated, must not exaggerate the extent of that additional protection and must disclose any qualifying information needed to correct misimpressions the claims would otherwise cause.

b. *Heat Detectors May Provide Additional Protection That Some Consumers Would Consider Significant Because They Are More Reliable Than Smoke Detectors*

In the words of one of complaint counsel's experts, heat detectors are "highly reliable." (Tr. 724)

They are pretty simple in terms of their construction. They are not electrically operated. They are mechanical in nature. There are fewer things to go wrong with them.

So when the conditions reach the level that they would normally activate, you are pretty sure they are going to activate. (Tr. 723)

Smoke detectors, on the other hand, do require occasional cleaning and will not function if the household's electrical power supply is interrupted or if batteries are not replaced periodically. Battery-powered smoke detectors sound an alarm [37] when the battery needs to be replaced, but some people may ignore that warning or fail to replace the old battery after removing it. Estimates of the percentage of battery-operated smoke detectors that are not functioning at any given time range from eight percent (Tr. 1048) to from 50 to 80 percent. (RX 5)

One of complaint counsel's experts estimated the failure rate at "30 to 40 percent." (Tr. 904-06)[25]

Obviously, an operating heat detector provides greater protection than a nonoperating smoke detector. The Cal Chiefs' and Indiana Dunes Tests show that heat detectors do not provide the necessary warning to allow safe escape in most residential fires, but heat detectors did provide warning before one or more tenability limits was exceeded in some test fires. The amount of additional protection provided by heat detectors is relatively large if the higher estimates of the failure rate of smoke detectors are accepted and relatively small if the lower estimates are used. But as we previously concluded, even a relatively small amount of additional protection from death or serious injury could be considered significant by some consumers. Complaint counsel have failed to prove that the [38] additional protection provided by the greater mechanical reliability of heat detectors is not significant.

Therefore, claims that heat detectors provide some additional protection because they are maintenance-free

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[25] The dissent states that all those failure rates should be discounted because smoke detectors that had a dead battery (or missing battery) or that did not meet the Underwriters' Laboratory smoke sensitivity standard were included in the "failed" category. We see no reason to lower the failure rate by arbitrarily excluding insufficiently sensitive detectors or detectors with dead batteries from the "failed" group. Dead batteries and gradual sensitivity loss due to dust accumulation are exactly the sort of problems to which heat detectors are not subject. Heat detectors are more reliable than smoke detectors not only because they have fewer or simpler parts but also because they don't require regular maintenance.

and mechanically rather than electrically operated are not necessarily deceptive. Again, unsubstantiated or exaggerated claims about the extent of that additional protection would be deceptive, and the disclosure of certain qualifying information may be required in advertising or promotional materials that make claims about the performance of heat detectors.

c. *Heat Detectors Do Not Respond More Quickly To Hot, Flaming Fires*

The Cal Chiefs' and Indiana Dunes Tests measured the response of heat and smoke detectors to hot, flaming fires and smoky, smoldering fires. Although Figgie claims that heat detectors are needed because they provide early warning of hot, flaming fires, the Cal Chiefs' and Indiana Dunes test results show that smoke detectors give earlier warning of both smoldering fires and flaming fires. As the National Fire Protection Association concluded, "the results of full-scale experiments conducted over the past several years . . . indicate that detectable quantities of smoke precede detectable levels of heat in nearly all cases." (CX 23K) [39]

Therefore, we find that Figgie's claims that its heat detectors provide significant additional protection because they respond more quickly than smoke detectors to hot, flaming fires are false.

V. FIGGIE HAD ADEQUATE NOTICE OF THE MATTERS OF FACT ASSERTED IN THIS PROCEEDING

Figgie argues that the Commission violated Section 554(b) of the Administrative Procedure Act[26] by failing to provide notice of "the matters of fact . . . asserted" in this case. Specifically, Figgie claims that the term "life endangering conditions," which appears in Paragraph 6(1) of the amended complaint, was never clearly defined. Consequently, Figgie argues that it was unable to understand and respond to the complaint's allegation that Figgie's claims that its heat detectors provide the necessary warning to allow safe escape in most fires are deceptive because "life endangering conditions will occur prior to the activation of [Figgie's] heat detectors" in nearly all residential fires. (RAB 13-20)

It is clear now that complaint counsel intended the term "life endangering conditions" to refer to the presence of smoke, heat or carbon monoxide at levels sufficient to impede or bar safe escape from a residential fire. It is hard to imagine that a manufacturer of fire detection devices would not have immediately assumed that smoke, heat and carbon monoxide, which are obvious fire-related dangers, were among the "life endangering conditions" mentioned in the complaint. After [40] prehearing conferences and pretrial discovery, including depositions of complaint counsel's expert witnesses and an examination of complaint counsel's documentary exhibits, it should have been completely clear that the term "life endangering conditions" included excessive

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[26] 5 U.S.C. 554(b) (1983).

levels of smoke, heat or carbon monoxide.[27] Because it was "apprised of the issues actually at stake and in fact litigated them throughout the proceeding,"[28] we conclude that Figgie had adequate notice of the matters of fact asserted.

VI. THE ALJ'S DECISION WAS NOT BASED ON "ALTERNATIVE THEORIES" NOT ALLEGED IN THE COMPLAINT

According to Figgie, the complaint essentially alleges that heat detectors are "virtually worthless" or "virtually useless." (RAP 21) The ALJ found that heat detectors are not worthless or useless but still concluded that Figgie had violated [**41**] Section 5. Therefore, Figgie argues, the ALJ wrongly imposed liability based on "alternative theories" not pled in the complaint.

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[27] For example, complaint counsel stated at the first prehearing conference on July 18, 1983, that they intended to show that heat detectors would not give warning of "life endangering conditions" created by "smoke [and] carbon monoxide." (Tr. 5) Complaint counsel's document list, which was filed on November 8, 1983, includes several documents reporting the results of the Cal Chiefs' and Indiana Dunes tests. In both of those tests, residential fire detectors were evaluated on the basis of whether they alarmed before certain levels of smoke, heat or carbon monoxide developed. Finally, Figgie cross-examined complaint counsel's expert witnesses extensively on the appropriateness of the smoke, heat and carbon monoxide levels that were used as tenability limits in those and other residential fire detector tests. (Tr. 714-18, 894-98, 907-24, 1069-70, 1086-89, 1092-1124)

[28] *ITT Continental Baking Co. v. FTC*, 532 F.2d 207, 216 (2d Cir. 1976).

The theory of the complaint is that Figgie made certain deceptive representations. The case was tried and defended by Figgie on that theory. The ALJ concluded that Figgie had made the alleged representations, that those representations were deceptive and that an order correcting those misrepresentations was appropriate. Complaint counsel admit that they believe heat detectors to be virtually worthless (CAB 23), but the complaint does not contain that allegation.

The ALJ did not conclude that heat detectors are virtually worthless, but he did conclude that the allegations in the complaint were proved by complaint counsel. Those conclusions are not inconsistent, and we affirm them.

VII. THE ORDER

We conclude that an order prohibiting Figgie from engaging in the same or similar deceptive acts and practices in the future is in the public interest. Unless we issue an appropriate order, future purchasers of Vanguard heat detectors may continue to be misled. It is also important that past purchasers of Vanguard heat detectors be provided with accurate information about the performance of Vanguard heat detectors. We reject the respondent's contention that "[i]f there is a problem here, there is no reason it should not be left to the free market to resolve it." (RAP A-26) **[42]**

After considering the record in this case and the arguments of counsel for both parties, we have decided to issue an order that differs in some respects from the ALJ's order. Our discussion of each section of the final

order will include an explanation of why those changes have been made.

A. *Part I of the Order*

Part I.A.(1) of the ALJ's order prohibits representations that heat detectors will provide the necessary warning to allow safe escape unless an affirmative disclosure that hazardous conditions usually develop before heat detectors activate is included. As complaint counsel argue, an order provision requiring an affirmative disclosure to help correct a misrepresentation does not obviate the need for an order provision prohibiting the misrepresentation directly. (CAP 4-7) We have modified Part I.A.(1) accordingly.

Part I.A.(2) of the ALJ's order prohibits representations that a combination system of heat and smoke detectors provides significantly increased protection unless an affirmative disclosure concerning standards for smoke detector location is included. Because we found that claims that a combined system provides increased protection because heat detectors respond more quickly to hot, flaming fires is deceptive, we have substituted a new provision to prohibit such misrepresentations. Of course, this provision is not intended to prevent truthful, substantiated representations that heat detectors may provide some additional protection because they can be installed in certain areas where [**43**] smoke detectors cannot and because heat detectors are maintenance-free and do not depend on electricity or batteries.

Parts I.B. and I.C. of the ALJ's order have not been changed.

B. *Part II of the Order*

Part II of the ALJ's order required that Figgie place the following affirmative disclosure on all promotional materials: "CAUTION: In most residential fires dangerous levels of smoke, heat and carbon monoxide gas will build up before the heat detector alarm goes off." Complaint counsel proposed making that disclosure even stronger: "CAUTION: Heat detectors will *not* help you get out of the house in time in most fires. Heat detectors will *not* protect you from most fires because dangerous levels of smoke, heat and carbon monoxide gas can build up before the heat detector goes off." (CAP 7-9)

We have concluded that the following affirmative disclosure would be more appropriate: "NOTICE: Smoke detectors give earlier warning than heat detectors in nearly all residential fires. That is because detectable amounts of smoke almost always develop before detectable levels of heat." This disclosure, which is a paraphrase of a statement found in Appendix A to NFPA Standard 74, is preferable to the disclosures proposed by the ALJ and complaint counsel for two reasons. First, it is more accurate because it is not clear from the evidence that dangerous levels of smoke, heat and carbon monoxide gas developed in the Cal Chiefs' and Indiana Dunes test fires before heat detectors [**44**] alarmed. Second, we believe that it is particularly important to inform consumers of the relative performance of heat and smoke detectors. The fact that smoke detectors almost always provide earlier warning than heat detectors would seem to be the single most useful piece of information that could be provided to potential purchasers of residential fire protection systems.

This disclosure must appear on all promotional materials that expressly or impliedly represent that heat detectors provide the necessary warning to allow safe escape in the event of fire or that a combination heat and smoke detector system provides significantly greater protection than smoke detectors alone.

C. *Par III of the Order*

Part III of the ALJ's order has not been changed.

D. *Part IV of the Order*

Complaint counsel appealed the ALJ's decision not to include an order provision requiring Figgie's dealers to obtain signed acknowledgements from purchasers of its heat detectors indicating that they had seen the affirmative disclosure required by Part II of the ALJ's order. According to complaint counsel, the dealers have an incentive to alter the brochures and other promotional materials prepared by Figgie but distributed to consumers by the dealers in order to delete or obscure the required affirmative disclosure. **[45]**

The ALJ's order does not apply to dealers, and there is a danger that some dealers may alter the required disclosure or otherwise deceive consumers. We therefore agree with complaint counsel that a "fencing in" provision aimed at preventing dealer misconduct is appropriate.

Complaint counsel's proposal to require dealers to obtain signed acknowledgements indicating that consumers have seen the required disclosure would burden honest dealers unnecessarily, yet would do nothing to

remedy other deceptive practices by dealers. Part IV of the order, therefore, requires Figgie to obtain written assurances that its dealers will conform their practices to this order, to cease selling fire warning devices to any dealer who does not provide such assurance, and to investigate and make good faith efforts to resolve any consumer complaints about deceptive practices by its dealers.

E. *Part V of the Order*

Part V of the ALJ's order has been amended to require Figgie to maintain and make available for our inspection copies of each complaint it receives about a dealer's sales practices and records of its investigation and disposition of each of those complaints. [46]

F. *Parts VI and VII of the Order*

Parts VI and VII of the ALJ's order have not been changed.

VIII. CONCLUSION

The ALJ's initial decision is affirmed in part and modified in part, and the attached order is entered.

STATEMENT OF COMMISSIONER PATRICIA P. BAILEY CONCURRING IN PART AND DISSENTING IN PART

The Commission rules today that respondent Figgie International, Inc. (Figgie) misrepresented the performance of its Vanguard heat detectors. I agree. Figgie

claimed that is heat detectors "provide the necessary fires. That is untrue for nearly all residential fires, and the Commission's order prohibits Figgie from repeating that claim.

The complaint in this matter also alleged that respondent claimed that is "fire alarm systems combining heat detectors and smoke detectors provide *significantly greater* fire warning protection for occupants than smoke detectors alone." Complaint para. 5 (emphasis added). The Commission agrees that this claim was made in three forms, but concludes that complaint counsel failed to prove that two of them were false.[1] I believe [2] complaint counsel adequately proved that heat detectors do not provide "significantly greater" protection in any of the three fashions claimed, and so I dissent from that part of the Commission's opinion.

Figgie made the following statements, all of which contribute to the notion that heat detectors provide significantly greater protection from fires than smoke detectors alone: "HEAT DETECTORS HAVE PROBABLY SAVED MORE LIVES AND PROPERTY THAN ANY OTHER FIRE DETECTION DEVICE" (CX 63); combining heat detectors with smoke detectors gives consumers "the combination needed to give a greater measure of life

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[1] The opinion examines three different ways in which Figgie represented that its heat detectors were significantly better than smoke detectors alone: in their response to hot, flaming fires; in their ability to be located where smoke detectors are not recommended; and in their mechanical reliability. The Commission rules the first claim deceptive, and I agree. My dissent focuses on the resolution of the second two claims. I join the Commission's opinion and order in all other respects.

safety" and is needed "to maximize chances for survival" (CXs 69, 68); and "to have adequate protection, the home must have heat detectors as well as smoke detectors." (CX 130) In the face of this and other evidence, the ALJ found that a claim of "significantly greater benefit" was made, and the Commission expressly adopts that conclusion. Opinion at 11 & n. 12.

The record evidence of how heat detectors actually perform compared to smoke detectors contrasts sharply with the picture Figgie painted in its advertising and marketing materials. For example, Figgie claimed that its heat detectors are significantly more protective because they can be placed where smoke detectors are not recommended (such as kitchens, garages, and attics). However, the expert testimony and test date introduced at trial establish that this confers virtually no life safety protection benefit over smoke detectors because smoke detectors almost always alarm before heat detectors, regardless of their [3] respective locations.[2] Figgie also claimed that

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[2] The record includes a test report in which a heat detector was placed in a kitchen and a smoke detector was placed in an adjacent hallway; after a fire was set in the kitchen, the smoke detector located elsewhere in the house alarmed before the heat detector located in the same kitchen. (I.D. 149) While this represents the result of only a single test, the conclusion about the respective performance of the devices holds true in almost all cases, according to experts who testified. They asserted that smoke detectors would almost always alarm before heat detectors because smoke disperses quickly and evenly throughout a home, while heat buildup is highly uneven. Detectors that react to smoke are not limited in space coverage the way that detectors that react to heat are. As a consequence, these experts testified that heat detectors would *not* significantly increase

heat detectors provide significantly more protection because they are mechanically reliable. Smoke detectors, which rely on outside power sources, are theoretically less reliable than mechanically operated heat detectors. But the most reliable empirical data in [4] the record suggests that the difference is quite small so that characterizing it as "significantly greater" life safety protection is inaccurate.[3]

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consumers' life safety potential and would provide only marginal benefits by increasing property protection. (Bukowski Tr. 1058-59; Clark Tr. 711-12).

Other test data in the record confirm that smoke detectors virtually always outperform heat detectors, regardless of location. For example, the Indiana Dunes I and II tests, showed that heat detectors provided no increase in escape time compared to smoke detectors (Bukowski Tr. 988-91) In Dunes I, heat detectors never activated first and in one-third of the tests no heat detectors ever activated at all (Bukowski Tr. 986) In Dunes II, not one heat detector alarmed in time to provide three minutes of escape time. (Bukowski Tr. 991) The California Fire Chiefs' tests, which included tests where fires were set in the kitchen, similarly reported that heat detectors never responded first to fires. (Martin Tr. 879) The commission's opinion discounts the results of these tests because it claims the tests measured only comparative heat and smoke detector performance in the same room. However, each test involved detector arrays in several locations in each house, so that the responses of heat and smoke detectors in different rooms were recorded and compared. The results show that smoke detectors alarmed in time to give the necessary three-minute warning in 89 percent of the tests in Dunes I, and that heat detectors added *no* increase in protection. (Bukowski Tr. 980, 982-83).

[3] The only objective data on comparative smoke detector reliability are from three tests, one showing a failure rate of approximately two percent per year, another showing a failure rate of eight percent over several years, and a third showing that

Moreover, this record demonstrates that: (1) smoke detectors provide the best protection for saving lives in case of fire; and (2) heat detectors, wherever placed, do not alarm soon enough to allow safe escape in most residential fires. Since heat detectors do not allow consumers to escape safely from most fires, but smoke detectors do, it is difficult to understand how heat detectors could be said to provide "significantly greater" protection than smoke detectors, or even any "significant" degree of protection at all.

The Commission's failure to enter a finding that Figgie's "significantly greater" benefit claims are deceptive stems primarily from what I believe to be a misreading of the complaint and complaint counsel's burden. The Commission agrees that the relevant claims were made and reaches conclusions not too dissimilar from my own about what level of increased protection heat detectors provide in the two situations in dispute. However [5] the Commission then asks not whether that level of increase is "significant," but whether even a small or slight increase might nevertheless be "important" or "meaningful" or "significant" to at least some consumers. This is the crux of the Commission's error: a shift in emphasis away from the complaint's focus on whether the *increase*

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16 percent of smoke detectors surveyed in the field over an indeterminate period were not operational. (Bukowski Tr. 1048) Because the definition of failure used to compile these figures encompasses a range of performance well short of mechanical failure – such as slight decreases in smoke detector sensitivity and removal of batteries (Bukowski Tr. 1051) – the rates of actual smoke detector failure are even lower than these figures suggest.

is significant and towards a new focus, not pled in the complaint and thus not litigated at trial, on whether the protection is or may be significant to some consumers.[4]

While this may appear to be only a subtle shift in emphasis, it reverses the result in the case. I would prohibit Figgie from repeating any claims to the effect that heat detectors provide "significantly greater" protection than smoke detectors, although I would permit the company to publicize whatever marginal increases in protection are demonstrated by the evidence because I agree with the opinion's conclusion that some consumers might consider even slight increases in fire protection "important" (particularly if they are highly risk averse). The Commission appears to agree that at least some of Figgie's increased benefit claims are false (concluding, for example, that placement of heat detectors confers only a "slightly," not a significantly, better level of protection), but refuses to ban those false claims [**6**] outright because complaint counsel failed to prove that no one would find slight increases in fire protection significant.[5]

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[4] This focus is especially curious since the actual claims Figgie made did not by any stretch of the imagination suggest that heat detectors added only slight increments of protection that could be important to some people. To the contrary, Figgie repeatedly stressed that consumers' chances for survival were significantly greater, or "maximize[d]," with heat detectors and that smoke detectors alone were inadequate to save them and their families from death by fire.

[5] The suggestion that complaint counsel should have provided testimony or survey evidence to show what level of additional protection consumers find "significant" is in my view unwarranted. *See* Opinion at 33. Once the Commission determines what claims Figgie made, this case simply does not

I think the opinion is trying to say that if consumers have no other protection, then heat detectors in their garages may help to prevent property damage, and that should consumers with smoke detectors fail to maintain them then a heat detector may provide an alarm that is late, but better than nothing. In other words, the Commission believes Figgie should be allowed to continue selling heat detectors to consumers who are sufficiently risk averse that they are willing to spend between $500 and $600 for a heat detector system that adds at most a slight increment of protection to smoke detectors. I do not disagree with that goal. I simply disagree with the notion that Figgie can continue to sell its heat detectors by convincing consumers that they are more valuable, and more beneficial in protecting the lives of consumers and their families, than the evidence shows to be true.

My dissent is tempered only by the fact that the order entered in this case prohibits Figgie from making performance claims for its heat detectors which cannot be substantiated. I believe the record of this proceeding contains clear evidence that Figgie cannot substantiate claims that its heat detectors [7] provide "significantly greater" life safety protection than do smoke detectors alone. For that reason, therefore, the order should have the effect of restraining Figgie indirectly from making exaggerated claims of this kind in the future. But there is not the slightest reason, on this record, to have left open

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present questions of consumer perception. Surely the Commission does not mean to suggest that complaint counsel must prove first that a claim is false as a matter of scientific fact and second that it is false in the subjective view of consumers.

any doubt on this point. Figgie's heat detectors do not provide "significantly greater" fire warning protection for occupants than smoke detectors alone, and Figgie should have been told directly in the order not to make that claim again or any of the statements that contributed to it.

FINAL ORDER

This matter has been heard by the Commission upon the appeals of respondent and complaint counsel from the initial decision, and upon briefs and oral argument in support of and in opposition to the appeals. For the reasons stated in the accompanying opinion, the Commission has denied the appeal of the respondent and has granted in part and denied in part the appeal of complaint counsel.

It is ordered, That the initial decision of the administrative law judge be adopted as the findings of fact and conclusions of law of the Commission except where it is inconsistent with the accompanying opinion. Other findings of fact and conclusions of law of the Commission are contained in the accompanying opinion.

It is further ordered, That the following order to cease and desist be entered:

I.

It is ordered, That respondent, Figgie International, Inc., its successors and assigns, and respondent's officers, agents, representatives and employees, directly or through any corporate or other device, in connection with

the advertising, offering for sale or distribution of any heat detector or any residential fire alarm system containing a heat detector, as the term "heat detector" is defined by the National Fire Protection Association's Standard 74, in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from: [2]

A. Representing in any manner, directly or by implication:

(1) That heat detectors provide the necessary warning to allow safe escape from most residential fires; or

(2) That fire alarm systems combining heat detectors and smoke detectors provide significantly greater fire warning protection than smoke detectors alone because heat detectors give earlier warning of hot, flaming fires.

B. Misrepresenting in any manner, directly or by implication:

(1) The performance characteristics of any heat detector or any residential fire alarm system containing a heat detector including, but not limited to, the capability of the heat detector to provide the necessary warning to occupants to allow them to escape safely in the event of fire; or

(2) The existence or content of any standard or recommendation established or made by the National Fire Protection Association or any other entity regarding the location, number of type of fire protection devices to be

installed in a residence, or compliance of any heat detector or residential fire alarm system containing a heat detector with any such standard or recommendations; or

(3) The performance characteristics of any smoke detectors or any residential fire alarm system containing a smoke detector; or

C. Representing in any manner, directly or by implication, the performance characteristics of any heat detector or any fire alarm system containing a heat detector including, but not limited to, the capability of the heat detector to provide fire warning protection, unless at the time of making any such representation respondent possesses and relies upon competent and reliable scientific evidence which substantiates such representation.

II.

It is further ordered, That respondent shall, within 120 days from the date of service of this order, include the following notice in all print advertising or print promotional material for all heat detectors manufactured or sold by respondent or for any fire warning system containing such heat detectors, if that advertising or promotional material expressly or impliedly represents that heat detectors provide the necessary warning to [3] allow safe escape in the event of fire or that a combination system of heat and smoke detectors provides significantly greater protection than smoke detectors alone:

NOTICE: Smoke detectors give earlier warning than heat detectors in nearly all residential fires. That is because

detectable amounts of smoke almost always develop before detectable levels of heat.

The above-required language shall be printed in a typeface and color that are clear and conspicuous, and, in multipage documents, shall appear on the cover or first page. Nothing contrary to, inconsistent with, or in mitigation of the above-required language shall be used in any advertising or promotional materials. With respect to any film, video tape, or slide promotional material, the above-required language shall be included both orally and visually within the first minute of the presentation, in a matter designed to ensure clarity and prominence.

III.

It is further ordered, That respondent shall, within 180 days after service of this order, send by first-class mail, to each identifiable purchaser of respondent's fire alarm products since January 1, 1979, the disclosure required by Part II.

Purchasers shall be deemed identifiable if they can be traced using warranty cards or testimonial letters in respondent's possession and/or using sales records maintained by respondent's dealers.

IV.

It is further ordered, That respondent shall:

A. Distribute a copy of this order to all of its officers and to all employees, agents or representatives having sales or promotional responsibilities with respect to the subject matter of this order. The respondent shall also

distribute a copy of this order to each dealer of its fire alarm products.

B. Provide each of its dealers with a form clearly stating that dealer's intention to conform his or her sales practices to the requirements of this order.

C. Cease selling its fire warning devices to any dealer who does not sign and return that form to respondent or fails to conform his or her sales practices to the requirements of this order. [4]

D. Investigate and make good faith efforts to resolve any complaints it receives that any dealer has failed to conform his or her sales practices to the requirements of this order.

V.

It is further ordered, That respondent shall maintain such documents as will demonstrate compliance with this order for a period of three years from the date the document is created or used, whichever is later. Such documents shall be made available to the Commission or its staff for inspection and copying upon reasonable request and shall include, but not be limited to, the following:

(a) A copy of each nonidentical form of promotional and training materials disseminated by respondent;

(b) The name and last known address of each dealer of respondent's fire alarm products;

(c) The name and last known address of each purchaser identified under Part III of this order; and

(d) A copy of each complaint it receives that any of its dealers has failed to conform his or her sales practices to the requirements of this order, and a record of the investigation and disposition of the complaint.

VI.

It is further ordered, That respondent shall notify the Commission at least thirty (30) days prior to any proposed change in the corporate respondent such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the corporation which may affect compliance obligations arising out of the order. [5]

VII.

It is further ordered, That respondent shall, within 120 days after service upon it of this order, file with the Commission a report, in writing, setting forth in detail the manner and form in which it has complied with this order.

Commissioner Bailey concurred in part and dissented in part and Commissioner Strenio did not participate.

FOR PUBLICATION

UNITED STATES COURT OF APPEALS

FOR THE NINTH CIRCUIT

FEDERAL TRADE COMMISSION, Plaintiff-Appellees, v. FIGGIE INTERNATIONAL, INC., Defendant-Appellant.	No. 91-55367 D.C. No. CV-88-4335-RMT (Filed Aug. 6, 1993)

Before: FLETCHER, O'SCANNLAIN, and KLEINFELD, Circuit Judges

The panel as constituted in the above case has voted to deny the petition for rehearing.

The full court has been advised of the suggestion for rehearing en banc and no judge of the court has requested a vote on it. Fed. R. App. P. 35(b).

The petition for rehearing is denied and the suggestion for rehearing en banc is rejected.

15 U.S.C.

§ 45. Unfair methods of competition unlawful; prevention by Commission

(a) Declaration of unlawfulness; power to prohibit unfair practices; inapplicability to foreign trade

(1) Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are declared unlawful.

(2) The Commission is empowered and directed to prevent persons, partnerships, or corporations, except banks, savings and loan institutions described in section 57a(f)(3) of this title, Federal credit unions described in section 57a(f)(4) of this title, common carriers subject to the Acts to regulate commerce, air carriers and foreign air carriers subject to the Federal Aviation Act of 1958, and persons, partnerships, or corporations insofar as they are subject to the Packers and Stockyards Act, 1921, as amended [7 U.S.C.A. § 181 et seq.], except as provided in section 406(b) of said Act [7 U.S.C.A. § 227(a)], from using unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce.

(3) This subsection shall not apply to unfair methods of competition involving commerce with foreign nations (other than import commerce) unless –

> **(A)** such methods of competition have a direct, substantial, and reasonably foreseeable effect –
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> > **(i)** on commerce which is not commerce with foreign nations, or on import commerce with foreign nations; or

(ii) on export commerce with foreign nations, or a person engaged in such commerce in the United States; and

(B) such effect gives rise to a claim under the provisions of this subsection, other than this paragraph.

If this subsection applies to such methods of competition only because of the operation of subparagraph (A)(ii), this subsection shall apply to such conduct only for injury to export business in the United States.

(b) Proceeding by Commission; modifying and setting aside orders

Whenever the Commission shall have reason to believe that any such person, partnership, or corporation has been or is using any unfair method of competition or unfair or deceptive act or practice in or affecting commerce, and if it shall appear to the Commission that a proceeding by it in respect thereof would be to the interest of the public, it shall issue and serve upon such person, partnership, or corporation a complaint stating its charges in that respect and containing a notice of a hearing upon a day and at a place therein fixed at least thirty days after the service of said complaint. The person, partnership, or corporation so complained of shall have the right to appear at the place and time so fixed and show cause why an order should not be entered by the Commission requiring such person, partnership, or corporation to cease and desist from the violation of the law so charged in said complaint. Any person, partnership, or corporation may make application, and upon good cause shown may be allowed by the Commission to

intervene and appear in said proceeding by counsel or in person. The testimony in any such proceeding shall be reduced to writing and filed in the office of the Commission. If upon such hearing the Commission shall be of the opinion that the method of competition or the act or practice in question is prohibited by this subchapter, it shall make a report in writing in which it shall state its findings as to the facts and shall issue and cause to be served on such person, partnership, or corporation an order requiring such person, partnership, or corporation to cease and desist from using such method of competition or such act or practice. Until the expiration of the time allowed for filing a petition for review, if no such petition has been duly filed within such time, or, if a petition for review has been filed within such time then until the record in the proceeding has been filed in a court of appeals of the United States, as hereinafter provided, the Commission may at any time, upon such notice and in such manner as it shall deem proper, modify or set aside, in whole or in part, any report or any order made or issued by it under this section. After the expiration of the time allowed for filing a petition for review, if no such petition has been duly filed within such time, the Commission may at any time, after notice and opportunity for hearing, reopen and alter, modify, or set aside, in whole or in part, any report or order made or issued by it under this section, whenever in the opinion of the Commission conditions of fact or of law have so changed as to require such action or if the public interest shall so require, except that (1) the said person, partnership, or corporation may, within sixty days after service upon him or it of said report or order entered after such a

reopening, obtain a review thereof in the appropriate court of appeals of the United States, in the manner provided in subsection (c) of this section; and (2) in the case of an order, the Commission shall reopen any such order to consider whether such order (including any affirmative relief provision contained in such order) should be altered, modified, or set aside, in whole or in part, if the person, partnership, or corporation involved files a request with the Commission which makes a satisfactory showing that changed conditions of law or fact require such order to be altered, modified, or set aside, in whole or in part. The Commission shall determine whether to alter, modify, or set aside any order of the Commission in response to a request made by a person, partnership, or corporation under paragraph [sic] (2) not later than 120 days after the date of the filing of such request.

15 U.S.C.

§ 53. Dissemination of false advertisements – temporary injunction – Power of Commission; jurisdiction of courts

(a) Whenever the Commission has reason to believe –

(1) that any person, partnership, or corporation is engaged in, or is about to engage in, the dissemination or the causing of the dissemination of any advertisement in violation of section 52 of this title, and

(2) that the enjoining thereof pending the issuance of a complaint by the Commission under section 45 of this title, and until such complaint is dismissed by the Commission or set aside by the court on review, or the order of the Commission to cease and desist made thereon has become final within the meaning of section 45 of this title, would be to the interest of the public,

the Commission by any of its attorneys designated by it for such purpose may bring suit in a district court of the United States or in the United States court of any Territory, to enjoin the dissemination or the causing of the dissemination of such advertisement. Upon proper showing a temporary injunction or restraining order shall be granted without bond. Any such suit shall be brought in the district in which such person, partnership, or corporation resides or transacts business.

* * *

(b) Temporary restraining orders; preliminary injunctions

Whenever the Commission has reason to believe –

(1) that any person, partnership, or corporation is violating, or is about to violate, any provision of law enforced by the Federal Trade Commission, and

(2) that the enjoining thereof pending the issuance of a complaint by the Commission and until such complaint is dismissed by the Commission or set aside by the court on review, or until the order of the Commission made thereon has become final, would be in the interest of the public –

the Commission by any of its attorneys designated by it for such purpose may bring suit in a district court of the United States to enjoin any such act or practice. Upon a proper showing that, weighing the equities and considering the Commission's likelihood of ultimate success, such action would be in the public interest, and after notice to the defendant, a temporary restraining order or a preliminary injunction may be granted without bond: *Provided, however,* That if a complaint is not filed within such period (not exceeding 20 days) as may be specified by the court after issuance of the temporary restraining order or preliminary injunction, the order or injunction shall be dissolved by the court and be of no further force and effect: *Provided further,* That in proper cases the Commission may seek, and after proper proof, the court may issue, a permanent injunction. Any such suit shall be brought in the district in which such person, partnership, or corporation resides or transacts business.

15 U.S.C. § 57b. Civil actions for violations of rules and cease and desist orders respecting unfair or deceptive acts or practices

(a) Suits by Commission against persons, partnerships, or corporations; jurisdiction; relief for dishonest or fraudulent acts

(1) If any person, partnership, or corporation violates any rule under this chapter respecting unfair or deceptive acts or practices (other than an interpretive rule, or a rule violation of which the Commission has provided is not an unfair or deceptive act or practice in violation of section 45(a) of this title), then the Commission may commence a civil action against such person, partnership, or corporation for relief under subsection (b) of this section in a United States district court or in any court of competent jurisdiction of a State.

(2) If any person, partnership, or corporation engages in any unfair or deceptive act or practice (within the meaning of section 45(a)(1) of this title) with respect to which the Commission has issued a final cease and desist order which is applicable to such person, partnership, or corporation, then the Commission may commence a civil action against such person, partnership, or corporation in a United States district court or in any court of competent jurisdiction of a State. If the Commission satisfies the court that the act or practice to which the cease and desist order relates is one which a reasonable man would have known under the circumstances was dishonest or fraudulent, the court may grant relief under subsection (b) of this section.

(b) Nature of relief available

The court in an action under subsection (a) of this section shall have jurisdiction to grant such relief as the court finds necessary to redress injury to consumers or other persons, partnerships, and corporations resulting from the rule violation or the unfair or deceptive act or practice, as the case may be. Such relief may include, but shall not be limited to, rescission or reformation of contracts, the refund of money or return of property, the payment of damages, and public notification respecting the rule violation or the unfair or deceptive act or practice, as the case may be; except that nothing in this subsection is intended to authorize the imposition of any exemplary or punitive damages.

(c) Conclusiveness of findings of Commission in cease and desist proceedings; notice of judicial proceedings to injured persons, etc.

(1) If (A) a cease and desist order issued under section 45(b) of this title has become final under section 45(g) of this title with respect to any person's, partnership's, or corporation's rule violation or unfair or deceptive act or practice, and (B) an action under this section is brought with respect to such person's partnership's, or corporation's rule violation or act or practice, then the findings of the Commission as to the material facts in the proceeding under section 45(b) of this title with respect to such person's, partnership's, or corporation's rule violation or act or practice, shall be conclusive unless (i) the terms of such cease and desist order expressly provide that the Commission's findings shall not be conclusive, or (ii) the order became final by reason of section 45(g)(1) of

this title, in which case such finding shall be conclusive if supported by evidence.

(2) The court shall cause notice of an action under this section to be given in a manner which is reasonably calculated, under all of the circumstances, to apprise the persons, partnerships, and corporations allegedly injured by the defendant's rule violation or act or practice of the pendency of such action. Such notice may, in the discretion of the court, be given by publication.

(d) Time for bringing of actions

No action may be brought by the Commission under this section more than 3 years after the rule violation to which an action under subsection (a)(1) of this section relates, or the unfair or deceptive act or practice to which an action under subsection (a)(2) of this section relates; except that if a cease and desist order with respect to any person's, partnership's, or corporation's rule violation or unfair or deceptive act or practice has become final and such order was issued in a proceeding under section 45(b) of this title which was commenced not later than 3 years after the rule violation or act or practice occurred, a civil action may be commenced under this section against such person, partnership, or corporation at any time before the expiration of one year after such order becomes final.

(e) Availability of additional Federal or State remedies; other authority of Commission unaffected

Remedies provided in this section are in addition to, and not in lieu of, any other remedy or right of action provided by State or Federal law. Nothing in this section shall be construed to affect any authority of the Commission under any other provision of law.